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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|------------------------------------|-------------|----------------------|-----------------------|------------------|
| 10/069,670 | 02/22/2002 | Xavier Leroy | P-6451 | 3622 |
| 28465 | 7590 | 05/16/2005 | EXAMINER | |
| DLA PIPER RUDNICK GRAY CARY US LLP | | | SWEARINGEN, JEFFREY R | |
| P. O. BOX 64807 | | | ART UNIT | PAPER NUMBER |
| CHICAGO, IL 60664-0807 | | | 2145 | |

DATE MAILED: 05/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | |
|------------------------------|-----------------------|---------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 10/069,670 | LEROY, XAVIER |
| | Examiner | Art Unit |
| | Jeffrey R. Swearingen | 2145 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 22 February 2002.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-27 is/are rejected.
- 7) Claim(s) 1-27 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 22 February 2002 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

| | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>9/23/02</u> | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "15" has been used to designate both an EEPROM and a serial link between Figure 1a and the specification (page 1). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: Figure 1a, item 13; Figure 2, item 103; Figure 3d, item 306; Figure 6, item 16. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

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Specification

3. A substitute specification in proper idiomatic English and in compliance with 37 CFR 1.52(a) and (b) is required. The substitute specification filed must be accompanied by a statement that it contains no new matter.

4. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

5. This application does not contain an abstract of the disclosure as required by 37 CFR 1.72(b). An abstract on a separate sheet is required. The Examiner has attempted to locate an abstract published with the international application under PCT Article 21, but was unable to do so. The Examiner will gladly remove the abstract objection if Applicant points out to Examiner an abstract that was published with the international application under PCT Article 21 that may have been overlooked.

6. The Examiner is including the following to assist Applicant in the creation of a substitute specification.

Content of Specification

- (a) Title of the Invention: See 37 CFR 1.72(a) and MPEP § 606. The title of the invention should be placed at the top of the first page of the specification unless the title is provided in an application data sheet. The title of the invention should be brief but technically accurate and descriptive, preferably from two to seven words may not contain more than 500 characters.
- (b) Cross-References to Related Applications: See 37 CFR 1.78 and MPEP § 201.11.
- (c) Statement Regarding Federally Sponsored Research and Development: See MPEP § 310.
- (d) The Names Of The Parties To A Joint Research Agreement: See 37 CFR 1.71(g).
- (e) Incorporation-By-Reference Of Material Submitted On a Compact Disc: The specification is required to include an incorporation-by-reference of electronic documents that are to become part of the permanent United States Patent and Trademark Office records in the file of a patent application. See 37 CFR 1.52(e) and MPEP § 608.05. Computer program

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listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text were permitted as electronic documents on compact discs beginning on September 8, 2000.

Or alternatively, Reference to a "Microfiche Appendix": See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.

(f) Background of the Invention: See MPEP § 608.01(c). The specification should set forth the Background of the Invention in two parts:

- (1) Field of the Invention: A statement of the field of art to which the invention pertains. This statement may include a paraphrasing of the applicable U.S. patent classification definitions of the subject matter of the claimed invention. This item may also be titled "Technical Field."
- (2) Description of the Related Art including information disclosed under 37 CFR 1.97 and 37 CFR 1.98: A description of the related art known to the applicant and including, if applicable, references to specific related art and problems involved in the prior art which are solved by the applicant's invention. This item may also be titled "Background Art."

(g) Brief Summary of the Invention: See MPEP § 608.01(d). A brief summary or general statement of the invention as set forth in 37 CFR 1.73. The summary is separate and distinct from the abstract and is directed toward the invention rather than the disclosure as a whole. The summary may point out the advantages of the invention or how it solves problems previously existent in the prior art (and preferably indicated in the Background of the Invention). In chemical cases it should point out in general terms the utility of the invention. If possible, the nature and gist of the invention or the inventive concept should be set forth. Objects of the invention should be treated briefly and only to the extent that they contribute to an understanding of the invention.

(h) Brief Description of the Several Views of the Drawing(s): See MPEP § 608.01(f). A reference to and brief description of the drawing(s) as set forth in 37 CFR 1.74.

(i) Detailed Description of the Invention: See MPEP § 608.01(g). A description of the preferred embodiment(s) of the invention as required in 37 CFR 1.71. The description should be as short and specific as is necessary to describe the invention adequately and accurately. Where elements or groups of elements, compounds, and processes, which are conventional and generally widely known in the field of the invention described and their exact nature or type is not necessary for an understanding and use of the invention by a person skilled in the art, they should not be described in detail. However, where particularly complicated subject matter is involved or where the elements, compounds, or processes may not be commonly or widely known in the field, the specification should refer to another patent or readily available publication which adequately describes the subject matter.

(j) Claim or Claims: See 37 CFR 1.75 and MPEP § 608.01(m). The claim or claims must commence on separate sheet or electronic page (37 CFR 1.52(b)(3)). Where a claim sets forth a plurality of elements or steps, each element or step of the claim should be separated by a line indentation. There may be plural indentations to further segregate subcombinations or related steps. See 37 CFR 1.75 and MPEP § 608.01(i)-(p).

(k) Abstract of the Disclosure: See MPEP § 608.01(f). A brief narrative of the disclosure as a whole in a single paragraph of 150 words or less commencing on a separate sheet

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following the claims. In an international application which has entered the national stage (37 CFR 1.491(b)), the applicant need not submit an abstract commencing on a separate sheet if an abstract was published with the international application under PCT Article 21. The abstract that appears on the cover page of the pamphlet published by the International Bureau (IB) of the World Intellectual Property Organization (WIPO) is the abstract that will be used by the USPTO. See MPEP § 1893.03(e).

(I) Sequence Listing. See 37 CFR 1.821-1.825 and MPEP §§ 2421-2431. The requirement for a sequence listing applies to all sequences disclosed in a given application, whether the sequences are claimed or not. See MPEP § 2421.02.

7. The disclosure is objected to because it contains an embedded hyperlink and/or other form of browser-executable code. Applicant is required to delete the embedded hyperlink and/or other form of browser-executable code. See MPEP § 608.01.

8. The use of multiple trademarks has been noted in this application. They should be capitalized wherever they appear and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

9. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

10. 35 U.S.C. 112, first paragraph, requires the specification to be written in "full, clear, concise, and exact terms." The specification is replete with terms which are not clear, concise and exact. The specification should be revised carefully in order to comply with 35 U.S.C. 112, first paragraph. Applicant is pointed throughout the specification to numerous sections where the system consists "at least" of a limitation. The Examiner is unable to determine where in the specification the required facets of the invention end and the optional components begin.

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11. Applicant is **STRONGLY URGED** to carefully review and amend the specification, drawings, and claims in order to make a good faith attempt at bringing the application close to conformance with current U.S. practice. Applicant is again reminded that no new matter is allowed within the specification.

Claim Objections

12. Claims 8-14, and 20-25 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend on another multiple dependent claim. See MPEP § 608.01(n). Accordingly, the claims have not been further treated on the merits. Claims 22 and 25 cannot be dependent from more than one independent claim.

13. Claims 1-27 are objected to because of the following informalities: The claims seem to consist entirely of lengthy preambles, with few to no patentable phrases present. Appropriate correction is required.

14. Claim 3 is objected to because of the method of designation of steps that Applicant has chosen to use (a, b', c', ...) is confusing and unclear to one of ordinary skill in the art. The Examiner suggests that Applicant find a different way of stating the steps of claims 1-3 in order to more clearly explain what Applicant is limiting.

15. Claim 4 is objected to because of the method of designation of steps that Applicant has chosen to use (α, β, γ) is confusing and unclear to one of ordinary skill in the art. The Examiner suggests that Applicant find a different way of stating the steps of claim 4.

16. Claims 5-6 are objected to because of the symbols \perp and \dashv that Applicant has used to designate types within the claims.

17. Claims 5, 6, 8, 17, and all claims dependent upon said claims are objected to because of the use of underlining within the claims.

18. Claims 5, 12-15, 17, 18 and 26 are objected because of using dashes to delineate steps and/or items within the claims.

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19. Claim 17 is objected to for the use of bullet points within the claim. The Examiner cannot determine how bullet points help the claim, and actually believes their usage confuses the claim here.

Claim Rejections - 35 USC § 101

20. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

21. Claims 1-3 and 23-25 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 1-3 are directed to a protocol, which is software that is not embodied in a physical media. Claims 23-25 are directed to a computer program product, but this product is not limited to statutory computer readable media.

Claim Rejections - 35 USC § 112

22. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

23. Claims 1-27 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The claim language is an obvious machine translation. The Examiner has consulted with multiple other Examiners in an attempt to ascertain the field of endeavor of the invention. Claim 1, for example, consists of a lengthy preamble followed by a series of unintelligible sentence fragments. The Examiner is unable to give any patentable weight to the phraseology "*in detecting a command for downloading of this program fragment; and, on a positive response to this stage consisting in detecting a downloading command*", and finds it difficult to believe

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that one of ordinary skill in the art could ascertain what this phrase means, much less actually enabling said phraseology. Further using claim 1 as an example, the Examiner is unclear on how the following steps happen with the invention: *detecting a command for downloading a program fragment*, what is considered a *positive response*, how is the *object code* read, how is *subjecting the whole of the object code stored temporarily in memory to a verification process* accomplished, how is *execution inhibited*, how is the *downloaded program fragment recorded in a directory*. Another further example is given for claims 5-6, because of the symbols \perp and \top that Applicant has used to designate *types* within the claims. The Examiner is unaware of any computer compiler that will allow usage of such type designations. Additionally, the Examiner points Applicant to the International Preliminary Examination Report, section VIII: Certain observations on the international application, which brings to light the fact that the *stack is empty at each branching instruction and at each branching target* in order for verification to take place. The phrase *updating of the effect of said current instruction on the type stack and the register type table* does not ensure that this takes place, thus making the claimed invention broader than the written description. Unless the claims clearly state that the stack is empty, the Examiner believes that the verification vaguely alluded to in the unclear specification and claims would be replete with machine errors and thereby not enabled.

24. Claims 1-27 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claims 1-27 refer to a *virtual machine*. It is the Examiner's opinion that the references given by Applicant which refer to a *virtual machine* in the background of the invention are not sufficient for the *virtual machine* definition required for the invention. Applicant is advised to clearly define what a *virtual machine* is for the invention.

25. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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26. Claims 1-27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

27. The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors.

28. As an example, claim 1 has following a lengthy preamble (bearing no patentable weight) the step of *in detecting a command for downloading of this program fragment; and, on a positive response to this stage consisting in detecting a downloading command*. The Examiner is unable to ascertain what is being claimed with this phrase.

29. Regarding claims 1, 4, and 23-26, the phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

30. Claim 1 recites the limitation "this stage" in line 16. There is insufficient antecedent basis for this limitation in the claim. Multiple additional claims have antecedent basis problems, but the Examiner believes that pointing out each individual error at this point would be unnecessary considering the extent to which the claims must be examined to determine what is an antecedent basis problem and what is a grammatical translation problem, given the current state of the claims.

31. Claims 5-6 are rejected because of the symbols \perp and \top that Applicant has used to designate types within the claims. The Examiner is unclear on this terminology in regard to usage in computer code for object type definition.

32. Claim 17 is rejected because the use of bullet points has made the claim unintelligible and generally indefinite. The Examiner believes that Applicant is attempting to define an order with the multiple dashes and bullet points used, but cannot ascertain any such order that is currently used by one of ordinary skill in the art.

33. Claims 1-27 are rejected as failing to define the invention in the manner required by 35 U.S.C. 112, second paragraph.

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34. The claim(s) are narrative in form and replete with indefinite and functional or operational language. The structure which goes to make up the device must be clearly and positively specified. The structure must be organized and correlated in such a manner as to present a complete operative device. The claim(s) must be in one sentence form only. Note the format of the claims in the U.S. patent(s) cited by Applicant in Applicant's submitted Information Disclosure Statement.

35. Applicant is urged to carefully review all claims in an attempt to expedite prosecution of the application. The numerous 112 errors present in the application may not be limited to what the Examiner has been able to discern due to the current state of the claims. The Examiner has made a good faith effort to identify every general type of error currently present in the claims to Applicant, but notes that additional errors such as enablement, written description, and antecedent basis problems may still be present in the claims and obscured by their current state.

36. In general, the state of the disclosure and claims in the instant application preclude a limitation-by-limitation assessment of the claimed invention compared to the prior art. Therefore prior art is applied under 35 U.S.C. §§ 102 and 103 in an attempt to expedite prosecution in anticipation of future amendments rather than strictly based upon the examiner's assumptions. See *In re Steele*, 305 F.2d 859, 134 USPQ 292 (CCPA 1962).

Claim Rejections - 35 USC § 102

37. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

38. Claims 1-7, 15-19, and 26-27 as best understood and interpreted by the Examiner are rejected under 35 U.S.C. 102(b) as being unpatentable by Gosling (U.S. Patent No. 5,784,964).

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39. The treated claims seem to be vaguely directed towards a method of verifying the content of a downloaded applet. Gosling discloses verifying the content of computer programs written in the OAK language, later renamed Java. The Gosling invention verifies instructions of such a downloaded Java program and prevents execution of the program if errors are found. See Gosling, Summary.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey R. Swearingen whose telephone number is (571) 272-3921. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Valencia Martin-Wallace can be reached on 571-272-6159. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MS

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